

THE COMMUNITY RATING SYSTEM (CRS)

SUMMARY

EXPLANATION

&

LOCAL CRS COORDINATOR CHECKLIST

Prepared by the

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THE COMMUNITY RATING SYSTEM (CRS)

What is it?

The CRS is a program within the National Flood Insurance Program (NFIP) which creates a financial incentive for communities to lower NFIP flood insurance premiums by "going above and beyond" the minimum requirements for NFIP eligibility. The CRS is a "win-win" program because it reduces a community's vulnerability to floods while reducing the cost of flood insurance premiums for all policy holders in that jurisdiction. The CRS is similar to community fire insurance ratings and is administered by the same risk management corporation, Insurance Services Office, Inc.

Who is eligible?

Any community which has been in the Regular Phase of the NFIP for at least one year and is in good-standing may apply.

How much reduction will I get?

Every community in the NFIP is automatically enrolled in the CRS with a rating of "10". There is an established number of "points" for activities which are determined to reduce flood damages and increase education. For every 500 points earned, the CRS number for that jurisdiction drops by one. For each one-point drop in the CRS number, the cost of each flood insurance premium in that community drops by 5%. Thus, aggressive community leaders who wish to reduce the cost of flood insurance premiums for his/her community's NFIP policy holders can do so through the CRS, potentially up to 45% with a "1" ranking. The potential for savings is greatest in communities which have a large number of NFIP premiums and have a comprehensive floodplain management program.

Tell me more about the points.

In general, points are accrued according to the three primary goals of the CRS to: reduce flood losses, facilitate accurate insurance ratings, and promote the awareness of flood insurance. More specifically, points may be awarded for four groups of activities:

- ?? Public Information
- ?? Mapping and Regulations
- ?? Flood Damage Reduction
- ?? Flood Preparedness

The attached "Local CRS Coordinator Checklist" was developed so you would be able to note which specific activities your community may qualify for and to see what sort of documentation is needed for each. Naturally, before FEMA agrees to reduce the flood insurance rates in a community, they would want to see proof that a community is really performing the creditable services it claims to be doing. Each community administers their floodplain management program differently, so an item-by-item analysis will be necessary.

What if our conditions change?

A community can apply for a lower rating at any time. For example, if a new, creditable floodplain ordinance is passed after its initial application, the community can apply for a lower rating if they think it is attainable. However, one thing should be made clear: if a community is found to be in violation of basic floodplain management requirements or if they are no longer performing an activity for which they have previously received credit, their CRS rating may automatically revert to a "10" (no reduction) or be increased (less of a premium reduction).

Are any Nebraska communities in the CRS?

Currently there are only two communities in Nebraska which are taking advantage of the CRS: Lincoln with an "8" and Fremont with a "9". However, several communities have expressed interest and are formulating applications. In addition, the CRS has been more aggressively publicized by the Nebraska Natural Resources Commission and we anticipate the number of CRS-participating communities to increase substantially in the next decade.

Tell me about the application process.

To get the ball rolling, send a letter on community stationery to the Nebraska Natural Resources Commission (address given below), stating your interest in applying for CRS credit. The NNRC is the State administering agency for the National Flood Insurance Program and also directs other flood mitigation and flood planning programs. The NNRC will contact you and may setup a face-to-face meeting to discuss the CRS and other floodplain management information. The purpose of this meeting is to look at documentation and brainstorm about whether or not your community would earn CRS points for flood-related activities you may already be performing.

The NNRC representative will also take care of forwarding your letter of interest to the FEMA Regional Office in Kansas City. FEMA's responsibility will be to send you information which will be used in your official CRS application. FEMA will also need to arrange a Community Assistance Visit, or CAV, in order to assess whether or not your community is in good-standing in the NFIP. Once the CAV is completed and any identified problems are rectified, FEMA will send a letter to the community, stating that they are in full-compliance with the NFIP. This letter must be submitted with the CRS application.

The next step is to complete the application and send it to the Insurance Services Office Community Rating System (ISO/CRS) Specialist for Nebraska (see contact information below). **The ISO/CRS Specialist will be your main point-of-contact for questions regarding the eligibility of activities which may receive CRS credit.** Upon receipt of the application, the ISO/CRS Specialist and the FEMA Regional Office will need approximately one month to review it for completeness and eligibility. If the application confirms that a community should have at least 500 points, the ISO/CRS Specialist will schedule a verification visit. This visit must be held within six months of receipt of the complete application. After the verification visit is complete and all needed documentation is received, FEMA and

ISO need another three months to review, double check, and confirm the Specialist's verification report. Once FEMA confirms the community's classification, it sends notice to the Chief Elected Official of the community and to the insurance companies. Therefore, it takes 5-9 months for FEMA and ISO to confirm the application and advise the insurance companies of the new classification. Furthermore, it may take an additional 3 months to advise their insurance agents. In addition, a community's CRS classification will take effect on the April 1 or October 1 of that year; thus, a CRS rating may start to take effect 8-12 months after the application is submitted.

What about administration of the CRS at our level?

The biggest complaint about the CRS is the amount of documentation and paperwork needed to apply. With 18 different categories and many more sub-elements for eligible credit, the need for concise documentation should be evident. Realize that the ISO/CRS Specialist will not be at familiar with your floodplain activities, so it is important to remember that all he/she will have to use is what you provide with your application. If you submit an application and receive a CRS rating of "9" or lower, a short reverification must be sent by the community's CRS Coordinator every year by October 1. The ISO/CRS Specialist will also conduct reverification visits every five years after the original application date.

Is there anything else I should know?

Yes! Without having to lift a finger, your community automatically qualifies for the following CRS credits:

- ?? Activity 310 – Maintaining Elevation Certificates: **56 points***
- ?? Activity 330 – State-Mandated Freeboard: **110 points**
- ?? Activity 630 – State Dam Safety Program: **68 points**

So by just doing your basic floodplain management activities, your community already qualifies for at least 234 points – and probably more – and that's nearly half-way to a "9" ranking!

*Communities must do this activity to qualify for a rating lower than "10". The number of points may be reduced if the ISO/CRS Specialist determines if the information on the elevation certificates is found to be incorrect or incomplete.

For more information about the eligible activities and the sort of documentation needed when applying for them, see the attached Local CRS Coordinator Checklist or contact one of the people below.

CONTACT INFORMATION

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Local CRS Coordinator Checklist

The CRS is divided into four **SERIES** of activities: “Public Information,” “Mapping and Regulation,” “Damage Reduction,” and “Flood Preparedness.” Within each series, there are three to six **ACTIVITIES**, and within each activity, there are one or more **ELEMENTS**. It is important to understand that credit points are determined for each element if the community meets the requirements for that element.

An **Impact Adjustment** is calculated for some elements when specific actions do not apply to the entire floodplain area. For example, a community can receive points for maintaining its floodplain area as open space. However, if half of the floodplain area is not currently in open space or is not guaranteed to be open space in the future (like a park would be), that community would be eligible for half of the total open space credits as an impact adjustment. A community will need to document how it determined the impact adjustment if one is used. If the specific elements below do not have an impact adjustment listed, the element does not have one. Every impact adjustment will have three choices from which the community must pick: full credit, minimum default credit, or partial credit. Using the above example, if a community maintains all of its floodplain as open space, they should use the first impact adjustment in order to get full credit, or 100% of their possible points. If a community does not have all of its floodplain as open space, they will have to choose between the remaining two options. For the open space element, the minimum default credit is 5% of the points if the community maintains at least 5 acres of the regulatory floodplain as open space. Thus, a community with 5 acres of floodplain open space would qualify for 36 points (the total allowable credit points, 725, multiplied by .05). However, if that community maintains 10 acres of its floodplain as open space, it would lose out on possible points by taking the minimum default; yet does not meet the full credit criteria. In this situation, communities can determine a ratio for more credit. For open space credit, a community must know the number of acres in open space and the number of acres of the regulatory floodplain in order to determine the ratio of floodplain area in open space. Let's say that the total floodplain area in the community is 100 acres. The 10 acres of open space would calculate to a ratio of 0.10 (10/100), which is then multiplied by the total credit points for open space (725) to determine the points earned, 72.5 – or 73. Therefore, even though the partial credit option required more effort and calculations to determine, the community's points were twice as great as the default minimum credit. Documentation may vary depending on which impact adjustment is chosen by the community. This informational packet will assume a community will opt for the partial credit adjustment – recognize that this may not be the case with your community.

The following is a list of each element in order to explain its importance, the presence of any impact adjustment, the sort of documentation which would be required for CRS points, and some examples of what some communities have done to earn these points. Note: this information is taken directly from the CRS Coordinator's Manual, January 1999, and is available from FEMA.

300 Series – PUBLIC INFORMATION

The CRS will credit those local activities that advise people about the flood hazard, flood insurance, and flood protection measures. The activities can be directed toward floodplain residents, property owners, insurance agents, real estate agents, or other segments of the local populace.

Activity 310 – Elevation Certificates (Maximum credit: 142 points)

Elements:

- 1) Maintaining Elevation Certificates – 56 points (***Required CRS activity**)
Action: The community agrees to maintain elevation certificates since the date of application to the CRS.
Documentation: Letter from jurisdiction
- 2) Maintaining Elevation Certificates for post-FIRM Buildings – 56 points
Action: The community maintains completed elevation certificates for all buildings built or substantially improved in the floodplain between the date of the community's original FIRM and the date of application to the CRS.
Documentation: Letter from jurisdiction, file of relevant elevation certificates
Impact Adjustment: Percentage of post-FIRM buildings in floodplain with elevation certificates (must know the number of post-FIRM buildings in the floodplain and the number of post-FIRM elevation certificates).
- 3) Maintaining Elevation Certificates for pre-FIRM Buildings – 15 points
Action: The community maintains completed elevation certificates for all buildings built or substantially improved in the floodplain before the date of the community's original FIRM.
Documentation: Letter from jurisdiction, file of relevant elevation certificates
Impact Adjustment: Percentage of pre-FIRM buildings in floodplain with elevation certificates (must know the number of pre-FIRM buildings in the floodplain and the number of pre-FIRM elevation certificates).
- 4) Maintaining elevation certificates in computer format – 15 points
Action: 10 points if the community keeps elevation certificate data in computer format and is willing to provide FEMA with a disk or other computer-readable format. 5 additional points if the database if the database contains street addresses for every property. (NOTE: the CRS computer format is available from FEMA on disk at no cost – contact the Nebraska Natural Resources Commission for more information.)
Documentation: Letter from jurisdiction, available computer files
Impact Adjustment: Percentage of all elevation certificates (numbers 1, 2, and 3 above) which are in the database

Activity 320 – Map Information (Maximum credit: 140 points)

- Action:* The community provides FIRM and flood insurance purchase requirement information to insurance agents, bankers, and real estate agents in the community. In addition to providing this service, the community must also publicize the availability of this service every year.
- Documentation:* A copy of the letter and a mailing list, stating to whom the letter was sent. A log must also be kept which details the inquiries (contact the NNRC for a sample log) and must have copies of old FIRMs that have

been in effect since 1999 or the date the community applied to the CRS, whichever is later.

Impact Adjustment: Only taken if mailing fails to reach all three interest groups

Activity 330 – Outreach Projects (Maximum credit: 290 points)

The ISO/CRS Specialist can recommend changes to your outreach projects before you publish them – this will ensure the most points for your efforts.

1) Outreach Projects to the Entire Community – 60 points

Action: Annual outreach project(s) which must reach at least **90%** of the properties in the community and cover the following topics:

- ?? The local flood hazard (8 points)
- ?? Flood safety (8 points)
- ?? Flood insurance (8 points)
- ?? Property protection measures (8 points)
- ?? The natural and beneficial functions of the local floodplain (8 points)
- ?? A map of the local flood hazard (4 points)
- ?? Flood warning system (4 points)
- ?? Floodplain development permit requirements (4 points)
- ?? Substantial damage/improvement requirements (4 points)
- ?? Drainage system maintenance (4 points)

(Note: not all topics must be covered in the same distribution – for example, a community with a quarterly newsletter would receive full credit if it covers two or three topics with each edition)

Impact Adjustment: Only taken if the outreach project(s) does not fully cover or does not cover all ten topics

Examples: Outreach can be done through a community newsletter, utility bill, telephone book, or other format. Newspapers may be used if it can be documented that it will reach at least 90% of the community's properties; newspaper articles cannot be placed in obscure places inside the newspaper.

2) Outreach Projects to Floodplain Properties – 130 points

Note: A mailing made to the entire community does not count for a mailing to the floodplain properties. If the community is situated entirely in a floodplain, two mailings of the same project would qualify for both mailings.

Action: Similar to #1 except that this annual mailing must reach at least 90% of the properties in the floodplain and clearly explain that the recipient's property is in subject to flooding. The ten topics in #1 are the same for this element; however, the eight-point topics are worth 17 points and the 4-point topics are worth 9 points.

3) Additional Outreach Projects – 60 points

Action: 2 points for each topic (see #1 above) covered in additional outreach projects. A community can earn a maximum of 20 points each for up to three projects. To be considered projects separate from the other outreach projects in #1 and #2, each project must either use different media or must involve two-way communication with a different audience. For example, presentations to the Chamber of Commerce, a neighborhood association, and a meeting of insurance agents are considered three separate projects;

however, handing the same brochure to the three groups and displaying the brochure in the city hall and library is considered one project. If the information of the brochure is also the subject of a cable television notice, it would be considered a second project.

Examples: A “Flood Hazard Awareness Week” or flyers inserted in local newspapers

4) Outreach Projects Pursuant to a Public Information Program Strategy – 100 points

This action allows communities with special flood considerations (i.e., ice jam floods) with the opportunity to develop a more specific public information program to meet those needs.

Action: There are five requirements for this element:

- ?? The community must establish a public information program strategy team which is composed of at least three members. One member must have knowledge of the community’s floodplain management program, and one member must be from outside the community’s government. This need not be a formal organization.
- ?? The outreach strategy team must prepare a written document which describes:
 - The local flood hazard
 - The flood safety and property protection measures appropriate for that hazard
 - The flood-related public information activities currently being implemented within the community (including those by non-governmental agencies)
 - Goals for the community’s public information program
 - The outreach projects that will be done each year to reach the goals
 - The process that will be followed to monitor and evaluate the projects
- ?? The projects must be in addition to any projects credited under #1 and #2 above. They do not have to cover the same 10 topics, but discussion of each topic must describe where to get more information.
- ?? The community must submit documentation that the strategy is being implemented by the community.
- ?? The community’s annual recertification must include a copy of an annual report evaluating the projects implemented.

Activity 340 – Hazard Disclosure (Maximum credit: 81 points)

1) Disclosure of the Flood Hazard – 46 points

Action: Real estate agents must notify those interested in purchasing property in a floodplain about the flood hazard and the insurance purchase requirement. The notice must clearly state whether the property is in the floodplain and, if so, that flood insurance is required. The community must submit examples of notices used by local real estate agents.

Action: 20 points if a state law requires real estate agents to ensure that those interested in purchasing properties located in floodplains are notified of the hazard.

Documentation: Copies of disclosure notices from at least five real estate agencies. If there are fewer than five agencies that serve a community, then at least one notice from each agency is submitted.

Examples: A box in the Multiple Listing Service (MLS) which is checked if the property is in the floodplain.

2) Other Disclosure Requirements – 15 points

Action: 5 points for each disclosure method required by law. Credit can be applied for up to three other disclosure methods, including but not limited to:

- ?? Requiring all sellers to disclose in order to cover those cases where a real estate agent is not involved.
- ?? Requiring real estate agents and sellers to advise potential purchasers whether “to the best of their knowledge and belief” the property has ever been flooded.
- ?? Requiring landlords to advise potential renters about the flood hazard.
- ?? Requiring final recorded subdivision plats to display the flood hazard area.
- ?? Requiring title and deed records to show zoning or building permit conditions related to floodplain or drainage regulations, such as a notice about the substantial improvement or substantial damage requirement for floodplain properties.
- ?? Requiring signs posted in subdivisions to advise visitors of the flood hazard.
- ?? Requiring deeds to show the lot of building elevation in relation to sea level and the base or historical flood elevation.

Documentation: A copy of the ordinance or law language requiring one of more additional disclosure methods at the time of sale or rental of a property.

3) Real Estate Agents’ Brochure – 10 points

Action: Communities will receive this credit if real estate agents are providing brochures or handouts that advise potential buyers to investigate the flood hazard for a property.

Documentation: A copy of the brochure or other document that is made available to interested parties by real estate agents. Samples documents are available.

4) Disclosure of Other Hazards – 10 points

Action: Similar to #3 except points are awarded for disclosing other flood-related hazards such as erosion, subsidence, or wetlands.

Documentation: Same as #3 above – a copy of the brochure or other document.

Activity 350 – Flood Protection Library (Maximum credit: 30 points)

1) Flood Protection Library – 25 points

Action: Points are awarded if at least one document from the following list of topics is entered into the library’s card catalog (or related system) which allows patrons to find publications related to flooding or flood protection:

- ?? 4 points – The community’s FIRM and the Flood Boundary and Floodway Map and an explanation of their use.
- ?? 2 points – Documents on flood insurance
- ?? 8 points – Documents on protecting a building from flooding

- ?? 3 points – Documents on community floodplain management or flood hazard mitigation
- ?? 3 points – Documents on the natural and beneficial functions of floodplains
- ?? 3 points – An up-to-date directory of addresses and telephone numbers of local, state, and federal offices that can provide more information on the above topics
- ?? 2 points – Including a reference on the Floodplain Management Resource Center and instructions on how to use it (for more information, contact the NNRC).

Documentation: A letter signed by the appropriate official responsible for administration of the library or library system which states:

- ?? A list of the documents available in the library and their publication dates.
- ?? A certification that the documents listed have been entered into the library's card catalog or similar system OR a copy of the card catalog cards or printout of the automated system's inventory of documents listed under "flood" or related topics.
- ?? A certification that the library will maintain adequate numbers of the listed documents to meet the demand and that the FIRM and other materials will be kept up-to-date.

Examples: The NNRC is capable of providing a list of free FEMA publications and how to obtain them.

2) Locally Pertinent Documents – 5 points

Action: 1 point for each document that is keyed to local conditions in the state, maximum of five.

Documentation: Same as #1 above.

Examples: The "State of Nebraska Community Flood Mitigation Planning Guidebook" is available from the NNRC.

Activity 360 – Flood Protection Assistance (Maximum credit: 71 points)

Note: This activity does not give credit for floodplain ordinance enforcement activities normally conducted by a building department, such as making site visits and/or reviewing plans to ensure they comply with the building code.

These are the six elements to this activity, each with a varying number of points:

A. 10 points

Action: Providing site-specific flood and flood-related data, such as floor elevations, data (i.e., flood warning times, flood velocities and duration, depths of flooding at or near the inquirer's property, and the amount of property damage, injuries, deaths, and other information which conveys the impact of flooding on the area and its residents) on historical flooding in the neighborhood, or similar information so inquirers can relate the flood threat to their properties.

Documentation: In addition to actually providing the service, the community must supply a copy of the document it uses to publicize the service.

Outreach projects under Activity 330 can be used for this publicity.

B. 4 points

Action: Providing names of contractors and consultants knowledgeable or experienced in retrofitting techniques and construction. The list must be organized by specialty (i.e., house movers, plumbers, waterproofers, etc.)
Note: this does not and cannot characterize endorsement of one contractor over another.

Documentation: A description of the technical qualifications of all persons who are providing the assistance.

C. 3 points

Action: Providing material on how to select a qualified contractor and what recourse people have if they are dissatisfied with a contractor's performance.

Documentation: If the person is not a community employee, a letter stating that the person and/or agency have agreed to do the work.

D. 35 points

Action: Making site visits to review flooding, drainage, and sewer problems and providing one-on-one advice to the property owner. The visit can be to review an existing problem or to provide advice to someone contemplating developing or improving a property. A record must be kept of each visit.

Note: this element differs from Element A that there is a site visit.

Documentation: A list of the names of contractors or consultants and/or a copy of the material the community provides on how to select a contractor.

E. 14 points

Action: Providing advice and assistance on the retrofitting techniques discussed in Activity 530 (Retrofitting).

Documentation: Records noting the date and type of assistance given for each element under this activity.

F. 5 points

Action: If the person providing the advice and assistance on retrofitting techniques has graduated from the *Retrofitting Floodprone Residential Buildings* course at the Emergency Management Institute.

Documentation: A copy of the certificate of graduation from EMI.

400 Series – MAPPING AND REGULATIONS

This series is subject to the **Community Growth Adjustment** – see Series 700 for more information.

The CRS provides credit to communities that enact and enforce regulations that exceed the NFIP minimum standards so that more flood protection is provided for new development.

Activity 410 – Additional Flood Data (Maximum credit: 1,230 points)

Note: Any new information must be put into an ordinance and adopted by the community in order to receive CRS credit.

Impact Adjustment: The percentage of floodplain area to which these standards of additional flood data apply. If it applies to the entire floodplain area in the community, there is no impact adjustment.

Documentation: If the impact adjustment is used, the community must prepare an Impact Adjustment Map which marks the appropriate areas affected by the additional flood data.

1) Regulatory Flood Elevation – 250 points

Action: The community must obtain and use new base flood elevation data in its Floodplain development regulations. The new elevation data must be based on a FEMA-approved technique or specifically approved by the FEMA Regional Office.

The credit points are based on the FIRM zone and the type of study that produces the regulatory flood elevation:

- A. If the base flood elevations are provided in an unnumbered A Zone (i.e., a floodplain without elevation data) then the points awarded shall be:
 - ?? 75 if the elevations are provided for a single site at the time of development
 - ?? 110 if the elevations are provided in a profile prepared for a relatively long reach of a stream
 - ?? 140 if the profile is submitted to FEMA with a request of map revision
 - ?? 150 if the profile is part of a comprehensive watershed study
 - ?? 190 if the profile is part of a comprehensive watershed study that is submitted to FEMA with a request for a map revision
- B. If base flood elevations are provided in a B, C, D, or X Zone (i.e., an are not mapped as a floodplain) then the points awarded shall be:
 - ?? 100 if the elevations are provided for a single site at the time of development
 - ?? 150 if the elevations are provided in a profile prepared for a relatively long reach of a stream
 - ?? 190 if the profile is submitted to FEMA with a request for a map revision
 - ?? 200 if the profile is part of a comprehensive watershed study
 - ?? 250 if the profile is part of a comprehensive watershed study that is submitted to FEMA with a request for a map revision
- C. If new base flood elevations are provided in an AE or A numbered Zone (i.e., a floodplain with base flood elevations) AND the new elevations are higher than the ones shown on the FIRM then the points awarded shall be:
 - ?? 75 if the elevations are provided in a profile prepared for a relatively long reach of a stream
 - ?? 90 if the profile is submitted to FEMA with a request for a map revision
 - ?? 100 if the profile is part of a comprehensive watershed study
 - ?? 150 if the profile is part of a comprehensive watershed study that is submitted to FEMA with a request for a map revision

Documentation: The ordinance or law language that adopts the flood study for regulatory purposes or that requires site-specific flood studies to be conducted at the time of permit application.

2) Additional Data Standards for the New Study – 165 points

Action: In any new study, points are awarded for performing the following proactive techniques:

?? 75 points if the study is based on “future conditions hydrology” (i.e., mapping as if a watershed is completely urbanized)

?? 75 points if the study delineates a floodway

Documentation: A copy of the study or an explanation of the technique used and a registered professional engineer’s statement that the study was based on a technique approved by FEMA.

?? 15 points if the study was reviewed and accepted by an approved state review process

Documentation: Usually from the responsible state agency, stating that the review was done and/or that the data are approved for regulatory purposes.

3) More Restrictive Floodway Standard – 200 points

Action: If the study’s floodway was based on FEMA’s surcharge standard of one foot, there is no credit for this element. Points are awarded for more restrictive floodway standards according by height:

?? 200 points if the floodway delineation was based on no allowable increase in the flood elevation

?? 150 points if the allowable rise was from 0.01 to 0.20 feet

?? 100 points if the allowable rise was from 0.21 to 0.50 feet

?? 50 points if the allowable rise was from 0.51 to 0.99 feet

4) Non-FEMA Share – 200 points

Action: A community receives credit for the portion of its floodplain study which was not funded by FEMA.

Formula: The number of points is calculated by the greater of the two:

?? 25 points or

?? The ratio of non-FEMA share of the total cost of the study multiplied by the equivalent credit for the study earned according to number 1, 2, or 3 above

Documentation: Must describe the non-FEMA share and who paid for it.

Examples: Supplying in-kind contributions for flood insurance restudies or hydrologic studies, performing topographic mapping for floodplain-related studies.

5) Additional Flood Data for Special Hazards – 50 points

Action: Credit for mapping areas of special flood-related hazards as described in *CRS Commentary Supplement for Special Hazards Credit*.

Activity 420 – Open Space Preservation (Maximum credit: 900 points)

One of the best ways to prevent flood damage is to keep flood-prone areas free of development.

Documentation: If a community chooses to use the partial-credit impact adjustment, it must create an Impact Adjustment Map, which clearly shows the entire regulatory floodplain in the community and a way to show where the open space areas are located. A legend should be used. The Natural Resources Commission is available for assistance.

1) Preserved Open Space – 725 points

Action: The community must assure that current open space will remain open space, that is, without buildings, fill, obstruction to flood flows, or loss of floodplain storage.

The following types of property do not qualify for this activity:

- ?? Properties outside of a community's regulatory floodplain
- ?? Areas with buildings on them which are insurable. Insurable buildings on parcels larger than 10 acres will not disqualify a lot, providing that the building is a "necessary appurtenance" of the open space use.
- ?? Street, parkway, railroad, levee, and canal rights of way.
- ?? Ditch and channel rights of way less than 100 feet wide unless they are the principal drainage feature in the area.
- ?? Parcels where filing or other encroachments may be placed.
- ?? Publicly-owned property that is not intended for open space use, such as a vacant lot in an industrial park.

Impact Adjustment: The ratio of open space area to the total area of regulated floodplain.

Documentation: Documentation showing the development restrictions for each parcel not owned by the community for which open space credit is applied. In the case of parks, golf courses, or other recreational preserve areas owned by the state or another public agency, a letter from the owning agency will suffice. In the case of privately-owned land, a charter for the preserve land or other written statement that demonstrates that the owner will preserve the land as open space is needed.

2) Deed Restrictions – 75 points

Action: The community places a deed restriction on open space within its boundaries. This will ensure that no future development will take place on those properties.

Impact Adjustment: The ratio of deed restricted areas to the total area of regulated floodplain area.

Documentation: Copies of the deed restrictions for each parcel.

3) Natural and Beneficial Functions – 100 points

Action: The community maintains open space which is in its natural, undeveloped state, has been returned to its natural state, or protects natural and beneficial floodplain functions. Wetland areas are the most common occurrence for this element.

Impact Adjustment: The ratio of area preserved for natural and beneficial Functions to the total area of the regulated floodplain.

Documentation: A letter signed by a professional stating that the parcels have been preserved in or restored to an undeveloped natural state.

4) Special Hazard Areas Preserved as Open Space – Credit points vary

Action: Credit for preserving areas subject to special flood-related hazards is described in *CRS Supplement for Special Hazards Credit*.

Activity 430 – Higher Regulatory Standards (Maximum credit: 1,750 points)

1) Freeboard – 300 points

Note: Nebraska State statutes require all new development in the floodplain to be placed one foot above the base flood (100-year) elevation. This automatically qualifies for CRS points (see also #12).

Action: The community receives credit for an adopted ordinance which requires all new development to be built a certain number of feet above the base flood elevation.

Formula: The number of feet of required freeboard multiplied by 100, maximum of 300 points. There are other formulas which can be used; however, this is the most common.

Documentation: The state or local ordinance language which adopts the regulatory standard. The community should explain its general building inspection process, demonstrating that this process ensures that structures are actually elevated as required by the ordinance.

2) Foundation Protection – 35 points

A. 35 points

Action: All new buildings are constructed on properly designed and compacted fill (ASTM D-698 or equivalent) that extends beyond the building walls before dropping below the base flood elevation and has appropriate protection from erosion and scour. The design of the fill or fill standard must be approved by a registered engineer.

B. 20 points

Action: All new buildings built on fill must be constructed on properly designed and compacted fill (ASTM D-698 or equivalent) that extends beyond the building walls before dropping below the base flood elevation and has appropriate protection from erosion and scour.

C. 10 points

Action: The community has adopted and enforces the soil testing and compaction requirements of the Standard, Uniform, or National Building Codes.

3) Cumulative Substantial Improvement Rules – 110 points

Documentation: The community must demonstrate that its permit process tracks permits for a structure to ensure that the regulatory requirement is met.

A. One of the following:

?? 45 points

Action: If the regulations require that improvements, modifications, and additions to existing buildings are counted cumulatively for at least 10 years.

?? 25 points

Action: Same as above, except for at least 5 years.

B. One of the following:

?? 45 points

Action: If the regulations require that reconstruction and repairs to damaged buildings are counted cumulatively for at least 10 years.

?? 25 points

Action: Same as above, except for at least 5 years.

?? 20 points

Action: If the community adopts regulatory language that qualifies

properties for Increased Cost of Compliance insurance coverage for repetitive losses.

C. 20 points

Action: If the regulations require that in addition to a building be protected from damage from the base flood.

4) Lower Substantial Improvement Threshold – 90 points

Minimum NFIP regulations define a substantial improvement as 50% of the fair-market value of the structure. Any improvement to a building over this amount means that the entire building must come into compliance, meaning it needs to be elevated to at least one foot above the base flood elevation. CRS credits adopted regulations which reduce this substantial improvement percentage according to the following:

- ?? 90 points if the regulatory threshold is less than 10%
- ?? 70 points if the regulatory threshold is 10% to 24%
- ?? 50 points if the regulatory threshold is 25% to 39%
- ?? 30 points if the regulatory threshold is 40% to 44%
- ?? 10 points if the regulatory threshold is 45% to 49%
- ?? 20 points if the regulatory threshold is no more than 25% of the bulk or square footage of the building's first floor
- ?? If the lower substantial improvements threshold applies to either improvements, modifications, and additions OR reconstruction and repairs, but not both, multiply the number of points by 0.50.

5) Protection for Critical Facilities – 100 points

A. 100 points

Action: New critical facilities are prohibited in the 500-year floodplain

B. 50 points

Action: New and substantially-improved critical facilities are required to be protected from damage and loss of access as a result of the 500-year flood or the flood of record, whichever is higher.

6) Protection of Floodplain Storage Capacity – 80 points

Credit is not provided for protection of storage capacity in floodways only.

A. 80 points

Action: Regulations prohibit fill within floodplains or flood fringes, including construction of buildings on fill.

B. 70 points

Action: Regulations require that new developments provide compensatory storage at hydraulically equivalent sites.

7) Natural and Beneficial Functions Regulations – 40 points

A. 10 points

Action: Regulations prohibit all activities in the floodplain that may be hazardous to public health or water quality

B. 5 points

Action: Regulations prohibit one or two specific activities in the floodplain that may be hazardous to public health or water quality, such as sanitary landfills or septic systems.

C. 15 points

Action: Regulations require new floodplain developments to avoid or

minimize disruption of stream channels and their banks.

Examples: Set-back regulations or silt fence requirements

D. 15 points

Action: Regulations adopted pursuant to a Habitat Conservation Plan approved by the U.S. Fish and Wildlife Service.

8) Enclosure Limits – 300 points

A. 300 points

Action: If regulations prohibit any building enclosures, including breakaway walls, below the base flood elevation.

B. 100 points

Action: If regulations prohibit enclosures of areas greater than 300 square Feet, including breakaway walls, below the base flood elevation. The area enclosed must still meet all NFIP requirements for openings, anchoring, and flood-resistant materials.

C. 50 points

Action: If regulations require that the owner of a building sign a nonconversion agreement, promising not to improve, finish, or otherwise convert the area below the lowest floor and granting the community the right to inspect the enclosed area.

9) Other Higher Standard – 50 points

Action: Up to 50 points for higher regulatory standards that prevent flood losses or protect natural and beneficial floodplain functions that are not otherwise credited in another element. The community's regulatory language is reviewed by FEMA to determine the credit points.

Documentation: An explanation of the procedures followed for enforcement of the regulatory standard.

10) Low Density Zoning – 600 points

These restrictions apply to credit for low density zoning:

?? A minimum lot size required by a public health ordinance for septic tanks is not counted toward low density zoning.

?? Lot coverage must not exceed 10% of including buildings and fill except in areas zoned for single family residential use.

Formula: The minimum lot size (in acres) multiplied by 60.

Impact Adjustment: Ratio of the total area of the regulatory floodplain which has low density zoning. Note: any area(s) which a community applies for under the Open Space element may not be double-counted here.

Documentation: The ordinance language that adopts the low density zoning standard.

11) Special Hazards Regulations – Credit points vary

Action: Credit for regulating areas subject to special flood-related hazards is described in *CRS Commentary Supplement for Special Hazards Credit*.

12) State-Mandated Regulatory Standards – 25 points

Action: Communities receive credit if the state has a mandated regulatory standard which is over and above the federal NFIP minimum standards.

Formula: 10% of the credit for each state-mandated regulation credited in the 400 series of CRS activities.

Note: The State of Nebraska does have a mandated freeboard statute – this means that all Nebraska communities are eligible for an additional 10 points.

13) Building Code and Staffing – 65 points

Action: This element uses the Building Code Effectiveness Grading Schedule (BCEGS) and only applies to communities applying for a CRS Class 6 or lower. Contact the Natural Resources Commission for more information about BCEGS.

Activity 440 – Flood Data Maintenance (Maximum credit: 226 points)

1) Additional Map Data – 121 points

Action: The community receives credit for digital or paper systems that improve access, quality, and/or ease of updating flood and FIRM data.

Prerequisites:

- ?? The system must be used regularly by the community regulatory staff
- ?? New data, including annexations, new subdivision maps, flood insurance restudies, letters of map revision/amendment, and studies performed for site-specific analyses, must be added at least annually to the database or overlay map
- ?? Digitized data must be make available annually to FEMA at not cost (if requested)

Credits:

- ?? 32 points for showing the regulatory floodplain boundaries, corporate limits, streets, and parcel or lot boundaries (a database management program must show whether a parcel is in the regulatory floodplain)
- ?? 8 points for showing the location of buildings (a database management program must show whether the primary building on the lot is in the regulatory floodplain)
- ?? 8 points for showing floodways (a database management program must show whether either the parcel or the primary building is in the floodway)
- ?? 8 points for showing the base flood elevations
- ?? 8 points for including FIRM Zone attributes (i.e., A3)
- ?? 8 points for showing the 500-year floodplain elevations or boundaries (a database management program would show whether the parcel is in the 500-year floodplain)
- ?? 8 points for showing special flood-related hazard areas (a database management program would show whether the parcel is subject to any of these hazards)
- ?? Either
 - ?? 15 points if the system meets FEMA's geographic information system mapping criteria and FEMA contributed to the community's system OR
 - ?? 25 points if the system meets FEMA's geographic information system mapping criteria and FEMA did not contribute to the community's system

Documentation: A computer disk with a portion of the geographic information system database.

- ?? 8 points for including updated floodplain data in the tax assessment database

- ?? 8 points for including overlays or layers for all FIRMs in effect after the date of the community's application to the CRS
- ?? 8 points for other overlays or databases used for regulation or mitigation programs

Impact Adjustment: If the additional map data is not maintained for the whole floodplain in a community, the impact adjustment is to take the ratio of the area with additional map data of the entire regulatory floodplain.

Documentation: A short summary of all elements of its flood data maintenance program, or a sample copy of the object for which credit is requested, which clearly shows all of the items to be credited.

Examples: GIS or CAD programs, map overlays, or database management programs which is used to store and update property-specific flood information. Should state if a parcel is "in" or "out" of the floodplain.

2) **Elevation Reference Mark Maintenance** – 90 points

Action: The community maintains elevation reference marks so surveyors can find them and can depend on them to be accurate.

Prerequisites:

- ?? The reference marks must be in the same datum as the base flood elevations on the community's FIRM or a datum that is readily convertible to the FIRM's datum.
- ?? The community must have a master list of the reference marks and clear descriptions of their locations in a publication that is readily available for surveyors and other interested parties. This may be a publication kept by another agency and there may be a reasonable charge for it.

Credits: There are two approaches for obtaining reference mark credit

- A. If the community initiates the maintenance of elevation reference marks by periodically checking their location and elevation
YCM = the number of years between checks of every elevation reference mark used in the community regulatory program. The minimum value of YCM is 2 (i.e., checks are run every two years); there is no credit if YCM is greater than 5.

- ?? 120/YCM if the elevation reference marks are of a type similar to those shown on the FIRM
- ?? 150/YCM if the elevation reference marks are permanent monuments
- ?? 180/YCM if the elevation reference marks are tied in to the National Geodetic Reference System

- B. If the community maintains, replaces, and/or adds to its elevation reference marks whenever it is notified that one is missing or otherwise unusable
 - ?? 20 points if the elevation reference marks are of similar type to those used on the FIRM
 - ?? 25 points if the elevation reference marks are permanent monuments
 - ?? 30 points if the community has at least three elevation reference marks listed in the National Geodetic Reference System
 - ?? 30 points if every developable site in the floodplain is within a half-mile of a permanent monument

Documentation: A copy of the master list of elevation reference marks and documentation that shows when they are repaired or replaced.

3) **FIRM Maintenance** – 15 points

Action: The community maintains copies of all FIRMs, Flood Insurance Studies, and Flood Boundary Maps that have been issued to the community. The FIRMs must be readily available and the community must allow inquirers access to them.

Documentation: Copies of the digitized mapping, parcel records, overlay maps, and/or old FIRMs, as appropriate.

Activity 450 – Stormwater Management (Maximum credit: 670 points)

One of the greatest problems of floodplain management in urbanizing areas is the increase in peak flow caused by watershed development. As forests, fields, and farms are covered by impermeable surfaces, such as streets, rooftops, and parking lots, more rain runs off at a faster rate. When an area is urbanized, the rate of runoff can increase five-fold or more.

1) **Stormwater Management Regulations** – 225 points

Action: Communities must require new development to prevent or reduce the Increase in runoff that results from urbanization in a watershed. To receive credit, the watershed must be subject to regulation that requires the peak runoff from new developments to be no greater than the runoff from the site in its pre-development condition. Credit may be provided for other approaches to managing the impact of development on runoff where the community can show that there is no increase in food damage downstream.

Impact Adjustment: The ratio of area which is under the stormwater management regulation to the area of all watersheds affecting the community.

Documentation: A copy of the ordinance or law language regulating surface water runoff from new developments in the watershed. For credit, the language must require that peak runoff from new developments be no greater than the runoff from the site in its pre-development condition. The language submitted must include the factors for which the community seeks credit: size of developments regulated, design storms to be used, and how the maintenance of drainage and retention facilities is handled.

Formula: Credit for stormwater management regulations is the total of the following three elements (if A is 0 then no credit is possible for #1):

A. **Size of Development** – 25 points

- ?? 25 points if all development is regulated
- ?? 20 points if all development is regulated except for single-family residences, parcels of ½ acre or less, or increases in impervious area of 5,000 square feet or less
- ?? 15 points if all development is regulated except for parcels of ½ acre or less or increases in impervious area of 10,000 square feet or less
- ?? 5 points if all development is regulated except for parcels of 5 acres or less or increases in impervious area of 20,000 square feet or less

- ?? 0 points if the regulations only affect development of parcels larger than 5 acres or increases in impervious area of more than 20,000 square feet.

B. Design Storms – 90 points

Action: The community uses similar standards for stormwater management projects that it uses for floodplain management. For credit, the community's regulations must require pre- and post-development hydrology calculations and post-development runoff must be limited to pre-development levels. The standard may be peak flow, volume, or a combination of the two.

Points:

- ?? 60 points if detention/retention is designed for the 100-year storm
- ?? 20 points if detention/retention is designed for a storm larger than then 10-year but smaller than the 100-year storm
- ?? 10 points if detention/retention is designed for a 10-year storm

C. Public Maintenance – 110 points

Action: The community assumes maintenance responsibility for all private facilities or if the community inspects all private stormwater facilities at least annually and has regulatory authority to require the owners to perform appropriate maintenance. Full credit is awarded if the community maintains all stormwater facilities in this fashion.

Documentation: Development and building permit records that demonstrate enforcement of the regulations.

2) Stormwater Management Master Plan – 225 points

Prerequisites:

- ?? The community must have adopted a stormwater management master plan for one of more of the watersheds that drain into the community.
- ?? The community has adopted regulatory standards for new construction in the watershed based on the plan.
- ?? The plan's regulatory standards manage future peak flows so that they do not increase over present values.
- ?? The plan's regulatory standards require management of runoff from all storms up to and including the 25-year event.

Points:

80 points if the stormwater management plan meets all of the prerequisites. The following additional points may be added:

- ?? 40 points if the plan provides management of future peak flows and volumes so that they do not increase over present values. If the community can demonstrate that its stormwater management plan prevents damaging increases in peak flows at all points within its watershed(s) and downstream, it will receive this credit.
- ?? 25 points if the plan manages the runoff from all storms up to and including the 100-year event.
- ?? 25 points if the plan manages the runoff from all storms up to and including the 5-day event. If a community can demonstrate that an event shorter than five days is the locally appropriate "worst case" scenario

runoff for stormwater management, it may receive the credit if it uses that event for its regulatory standard.

- ?? 15 points if the plan identifies existing wetlands or other natural open space areas to be preserved from development to provide natural attenuation, retention, or detention of runoff.
- ?? 10 points if the plan prohibits development, alteration, or modification of existing natural channels.
- ?? 10 points if the plan requires that channel improvement projects use natural or “soft” approaches rather than gabions, rip rap, concrete, or other “hard” techniques.

Documentation: How the plan utilizes or protects the existing natural stormwater features within the watershed (only for 4th, 5th, and 6th bullet of #2).

- ?? 20 points if the plan was prepared in coordination with or as a part of the community’s floodplain management plan credited under Activity 510.

Documentation: A statement by the community official responsible for implementation of the stormwater management plan that it was prepared in coordination with or as part of the community’s Floodplain Management Plan credited under Activity 510. This documentation may be provided from either plan if it is contained there.

Documentation: Copies of the pages of the stormwater management master plan that show the following:

- ?? Management of peak flows and volumes so that they do not exceed present values. The plan must include either regulations that meet these criteria, or must be based on a rainfall/runoff model that achieves these results.
- ?? The recurrence interval of the storm used for the regulations and/or model.
- ?? The duration of the storm used for the regulations and/or model.

3) Freeboard for New Buildings in B, C, D, and X Zones – 150 points

Action: The community requires new buildings outside of the floodplain to be built so that it is not subject to street flooding or on-site drainage problems. Credit is not provided for a freeboard requirement above the base flood elevation. This credit is not available for communities located entirely within a floodplain.

Points – one of the following:

- ?? The height in feet that the lowest floor (including basement) must be above the crown of the nearest street or the highest grade adjacent to the building multiplied by 50. The height is reduced .50 feet if the standard is an elevation above the gutter rather than the crown of the street.
- ?? The height in feet that the lowest opening or point-of-entry must be above the crown of the nearest street or the highest grade adjacent to the building multiplied by 25. The height is reduced .50 feet if the standard is an elevation above the gutter rather than the crown of the street.
- ?? 50 points if the regulations require that as a condition for a building permit, the applicant must prepare a site plan that accounts for local

drainage from and onto adjoining properties and that protects the building from local drainage flows.

- ?? 20 points if the regulations require that the applicant provide positive drainage away from the building site.

Documentation: A copy of the ordinance or law language that requires elevation of the lowest floor or lowest opening of new buildings.

4) Erosion and Sedimentation Control Regulations – 45 points

Action: The community has an adopted erosion or sedimentation control regulation.

Points:

- ?? 45 points if regulations control erosion and soil loss from any disturbed land, including agricultural lands, greater than 1,000 square feet.
- ?? 35 points if regulations control erosion and soil loss from construction sites as small as a ½-acre
- ?? 30 points if regulations control erosion and soil loss from construction sites as small as 1 acre
- ?? 15 points if regulations control erosion and soil loss only from construction sites greater than 5 acres

Documentation: The ordinance or law language that requires developers or property owners to use techniques that prevent erosion and soil loss from exposed land. The ordinance(s) or law must designate an office or official responsible for receiving complaints and monitoring compliance and it must include enforcement and abatement provisions.

5) Water Quality Regulations – 25 points

Action: 25 points if regulations require new developments of 5 acres or more to include in the design of their stormwater management facilities appropriate “best management practices” that will improve the quality of surface water.

Documentation: The ordinance or law language that requires new developments to implement appropriate best management practices to improve water quality.

SERIES 500 – FLOOD DAMAGE REDUCTION

This series of activities address flood damage to existing buildings; it complements the previous series that deal with preventing damage to new development.

Recognized damage reduction measures include acquiring, relocating, or retrofitting existing buildings and maintaining drainageways and retention basins. The CRS does not provide credit for structural for structural flood control projects.

Activity 500 – FLOOD DAMAGE REDUCTION

1) Repetitive Loss Category - (*Required CRS activity)

FEMA defines a “repetitive loss” property as one which had two or more claims of at least \$1,000 paid by the NFIP within any 10-year period since 1978. Although the number of these properties is only less than 2% of the total buildings insured by the NFIP nationwide, they account for one-third of the claims. The CRS gives points to any community which does something to reduce or eliminate these repetitive loss structures. However, if your

community has at least one repetitive loss property in the FEMA database, this element is required for CRS entry.

Category A – Zero repetitive loss properties

Action: No special requirements except to submit information needed to correct the repetitive loss list.

Category B – 1 to 9 repetitive loss properties

Action: The community must review

- ?? Describe the causes of its repetitive loss problem
- ?? Prepare a map of the repetitive loss area(s). The map must include the properties on the repetitive loss list obtained from FEMA and adjacent properties with the same or similar flooding conditions.
- ?? Undertake an annual outreach project to the repetitive loss area(s) which:
 - A. Must advise the recipient of three things:
 - ☞☞ Their property is subject to flooding
 - ☞☞ There are property protection measures for their situation
 - ☞☞ Basic facts about flood insurance
 - B. The outreach project must be sent to all properties in the repetitive loss areas, not just the properties on the FEMA list. This may be done by one of three ways:
 - ☞☞ An outreach project that is distributed each year and that reaches at least 90% of the properties in the repetitive loss areas. This project may also be submitted for credit as an additional outreach project under Activity 330.
 - ☞☞ An outreach project pursuant to the public information strategy credited in Activity 330, provided that it identifies the target audience and discusses the best way to advise that audience about the hazard, property protection, and flood insurance.
 - ☞☞ An outreach project that does the same as the first two options, but is not credited under Activity 330. The materials must be distributed each year and must reach at least 90% of the target audience.

A copy of the outreach project is submitted each year for recertification.

Category C – 10 or more repetitive loss properties

Action: In addition to doing the same actions as Category B, the community Must prepare a floodplain management plan for its repetitive loss areas. The plan requirements are explained in Activity 510.

Activity 510 – Floodplain Management Planning (Maximum credit: 235 points)

A floodplain management plan, or flood mitigation plan, details what the citizens feel is the problem with flooding in a community, what can be done about it, who is involved, when projects can be done, and several others.

Impact Adjustment: Only taken if the plan does not cover all of the community's known flood hazard areas.

Documentation: A description of the process used to develop the plan must be

Included, either as part of the plan or attached to it. While some of the steps can be explained in a separate memo, the following must appear in the plan document:

- ?? The hazard assessment
- ?? The problem assessment
- ?? Goals of the floodplain management program
- ?? The review of possible activities
- ?? The action plan

Action: A community adopts a document which explicitly states how it will reduce its flood vulnerabilities. To receive credit, a community must receive some credit for each of these 10 steps:

1) Organize to Prepare the Plan – 10 points

- ?? 2 points if the planning process is under the supervision or direction of a professional planner
- ?? 6 points if the planning process is conducted through a committee composed of staff from those community departments that will be implementing the majority of the plan's recommendations
- ?? 2 points if the planning process and/or the committee are formally created or recognized by action of the community's governing board

2) Involve the Public – 48 points

Action: Residents, businesses, property owners, and tenants are involved in the planning process.

- ?? 2 points for at least one meeting to obtain public input on the draft plan held at the end of the planning process at least two weeks before submittal of the recommended plan to the community's governing body
- ?? 8 points if one or more public meetings are held in the affected area(s) at the beginning of the planning process to obtain public input on flood problems and possible solutions
- ?? 4 points if public information activities are implemented to explain the planning process and encourage input to the planner or planning committee
- ?? 4 points if written comments and recommendations are solicited from neighborhood groups, homeowners' associations, parent-teacher organizations, the Chamber of Commerce, or similar organizations that represent the public in the affected area(s)
- ?? 26 points if the planning process is conducted through a planning committee that includes members of the public. Additional rules apply about the number of public representatives and the number of meetings.

Documentation: A copy of the notice(s) advising floodplain residents about the meeting(s) held.

3) Coordinate with Other Agencies – 18 points

Other agencies (i.e., neighboring communities and local, state, regional, and federal agencies) have different programs and expertise which may make your plan more effective and efficient.

- ?? 3 points if the other agencies are contacted at the beginning of the planning process and asked for their input

- ?? 10 points if meetings are held with representatives of agencies to review common problems, development policies, mitigation strategies, inconsistencies and conflicts in policies, plans, programs, and regulations
- ?? 3 points if the planning includes a review of the community's needs, goals, and plans for the area
- ?? 2 points for sending the draft action plan to the other agencies and asking them to comment by a certain date
- 4) Assess the Hazard – 10 points
 - ?? 5 points for including the following in the plan:
 - ✍✍A map of the known hazards, which means the floodplain shown on the FIRM, repetitive loss areas, areas not mapped on the FIRM that have flooded in the past, and surface flooding identified in existing studies. No new studies need to be conducted for this assessment.
 - ✍✍A description of the known flood hazards, including source of water, depth of flooding, velocities, and warning time, where such data are available.
 - ✍✍A discussion of past floods, where such data are available.
 - ?? 5 points if the plan includes a map and description of other natural hazards, such as erosion or ice jams.
- 5) Assess the Problem – 35 points

Action: The community assesses the impact of flooding.

 - ?? **(REQUIRED)** 2 points for including the number and types of buildings subject to the hazards identified in the hazard assessment
 - ?? 5 points if the assessment includes a review of all properties that have received flood insurance claims (in addition to repetitive loss structures)
 - ?? 6 points if the plan includes a description of the impact that past or predicted flooding has on buildings, infrastructure, and public health and safety
 - ?? 3 points if the plan describes the need and procedures for warning and evacuating residents and visitors
 - ?? 4 points if the plan identifies critical facilities, such as hospitals, fire stations, and chemical storage companies
 - ?? 4 points if the plan describes areas that provide natural and beneficial functions, such as wetlands, riparian areas, sensitive areas, and habitat for rare or endangered species
 - ?? 5 points if the plan includes a description of development, redevelopment, and population trends and a description of what the future brings for development and redevelopment in the floodplain, the watershed, and natural resource areas
 - ?? 6 points if the plan includes a summary of the impact of flooding on the community and its economy and tax base
- 6) Set Goals – 2 points

Examples of goals might be to protect buildings from flood damages, keep the business district economically viable during high water, or to ensure residents are given adequate warning time before ice jam floods.
- 7) Review Possible Activities – 30 points

Action: The plan must describe those activities that were considered and note

why they were or were not recommended. If an activity is currently being implemented, the plan must note whether it should be modified. The discussion of each activity needs to be detailed enough to be useful to the lay reader.

Points: The total of the following points based on which floodplain management activities are reviewed in the plan:

- ?? 5 points if the plan reviews preventative activities, such as floodplain and stormwater regulations and preservation of open space and the effectiveness of current regulatory and preventive standards and programs
- ?? 5 points if the plan reviews property protection activities, such as acquisition, floodproofing, and flood insurance
- ?? 5 points if the plan reviews activities to protect the natural and beneficial functions of the floodplain, such as wetlands protection
- ?? 5 points if the plan reviews emergency services activities, such as flood warning and sandbagging
- ?? 5 points if the plan reviews structural projects, such as reservoirs and channel modifications
- ?? 5 points if the plan reviews public information activities, such as outreach projects and environmental education programs

8) Draft an Action Plan – 60 points

An action plan specifies those activities appropriate to the community's resources, flood hazard, and vulnerable properties. For each recommendation, the action plan must identify who does what, when it will be done, and how it will be financed.

Points: If the action plan includes recommendations for activities from:

- ?? 2 of the 6 categories in element #7 – 10 points
- ?? 3 of the 6 categories in element #7 – 20 points
- ?? 4 of the 6 categories in element #7 – 30 points
- ?? 5 of the 6 categories in element #7 – 40 points
- ?? 10 additional points if the action plan establishes post-disaster mitigation policies and procedures
- ?? 10 additional points if the action plan's recommended natural resource protection activities include the recommendations from its community-wide Habitat Conservation Plan. This credit is subject to acceptance of the plan by the U.S. Fish and Wildlife Service

9) Adopt the Plan – 2 points

Action: The community's governing body officially adopts the plan and later amendments.

Documentation: Documentation showing that the plan has been adopted by the community's governing body.

10) Implement, Evaluate, and Revise – 10 points

Action: The community monitors and evaluates its plan.

Points:

- ?? 2 points if the community has procedures for monitoring implementation, reviewing progress, and recommending revisions to the

plan in an annual evaluation report. The report must be submitted to the governing body, released to the media, and made available to the public.

- ?? 8 points if the evaluation report is prepared by the same planning committee that prepared the plan.

11) Habitat Conservation Plan – 10 points

This element is not one of the ten which needs to be included in the plan, as mentioned above.

Action: The community adopts a community-wide Habitat Conservation Plan, which is subject to acceptance from the U.S. Fish and Wildlife Service.

Activity 520 – Acquisition and Relocation (Maximum credit: 3,200 points)

Buying flood-prone structure and demolishing it or physically moving a building out of the floodplain are the two most effective ways of permanently eliminating flood damages to a specific property. Also, remember that any vacant property would qualify for open space credit, especially if there is a deed restriction on the property after it has been acquired or moved.

There are two options of how to calculate credit; both depend on the number of structures that have been acquired or removed.

Option 1: Maximum credit of 100 points

Formula: 5 points for each property acquired or removed, up to 20 buildings

Option 2: Maximum credit of 3,200 points

Formula: 32 multiplied by rAR

$$rAR = \frac{100 \times (bAR + bRL)}{bSF + bAR + bRL}$$

- ?? bAR = the number of buildings acquired or relocated
- ?? bRL = the number of removed buildings from the repetitive loss list
- ?? bSF = the total number of buildings in the floodplain

This formula allows you to essentially double-count any building from the repetitive loss database – option 1 does not allow this. Essentially, this formula takes the ratio of the number of acquired/relocated structures as a proportion of the total floodplain properties.

Documentation:

- ?? A map showing the location of parcels where floodprone buildings have been demolished or relocated since the effective date of the FIRM and the total number of such buildings (bAR above)
- ?? Documentation that shows that each site credited under this activity can also qualify for credit as open space.
- ?? Calculations showing the total number of buildings in the floodplain (only necessary if community applies for Option 2).
- ?? Real estate or permit records that document the date of removal of each building.

Activity 530 – Retrofitting (Maximum credit: 2,800 points)

Credit is provided for buildings that have been floodproofed, elevated, or otherwise modified to protect them from flood damage. Credit is based on the number of insurable buildings in the area of regulated floodplain that have been retrofitted since the date of the community's original FIRM.

Credit:

For this activity, since techniques and level of protection could be quite different, each retrofitted building could qualify for a different number of points. To calculate the number of points a community may apply for under this activity, the following two variables will need to be determined:

1) Retrofitting Technique Used (TU)

A local permit must have been issued for the project or the local permit officer must state in writing that the project complies with local codes.

Note: if the project requires human intervention (i.e., putting up floodgates) or if it is located in a high hazard area, more conditions apply.

- ?? For buildings which have been elevated, TU = 1.0
- ?? For buildings protected by a barrier, the barrier must be located entirely on the building owner's property and meet the following criteria:
 - ?? TU = 0.8 if the barrier was designed by a licensed engineer or architect and the design accounts for openings and internal drainage, seepage, and underdrainage.
 - ?? TU = 0.6 if the barrier handles interior drainage with a secure source of power and it has no openings.
 - ?? TU = 0.4 if the barrier either handles interior drainage with a secure sources of power or it has no openings.
 - ?? TU = 0.2 for all other cases, including those for which there is no documentation of how interior drainage and access are handled.
- ?? For buildings that are dry floodproofed, the project must protect to a level less than 3 feet over the first floor and the project must meet the following criteria:
 - ?? TU = 0.6 if the project was designed by a licensed engineer or architect and the design accounts for opening and internal drainage, seepage, and underdrainage.
 - ?? TU = 0.4 if the project does not depend on human intervention to close openings, and the design accounts for internal drainage, seepage, and underdrainage, and the building does not have a basement.
 - ?? TU = 0.2 for all other cases, including those for which there is no documentation of how openings, internal drainage, seepage, or underdrainage are handled.
- ?? For buildings that are wet floodproofed:
 - ?? TU = 0.5 if the project was designed by a licensed engineer or architect.
 - ?? TU = 0.3 if the project was not designed by a licensed engineer or architect.
 - ?? TU = 0.2 if the furnace, water heater, electrical breaker box, and other utilities are relocated above flood level.
- ?? For buildings with basements protected from sewer or sump backup:
 - ?? TU = 0.2 if the building is located in the floodplain.
 - ?? TU = 0.1 for sewer backup measures if the building is located outside of the floodplain and the community has a building code or other regulations that require positive drain sewers or other measures

that prevent sewer backup into new buildings. A maximum of 200 points is provided under this activity for sewer backup prevention measures outside of the floodplain.

- ?? Other methods and variations on these methods can be submitted for review to determine the credit points.

2) Flood Protection Level (FPL)

For any protection measures determined in #1, this section takes the level, or flood height, to which that measure protects.

- ?? FPL = 1.0 if protection is to the base flood elevation + 3 feet (or 500-year flood elevation + 1 foot, whichever is lower)
- ?? FPL = 1.0 if the basement is protected from sewer/sump backup
- ?? FPL = 0.9 if protection is to the base flood elevation + 2 feet (or 500-year elevation, whichever is lower)
- ?? FPL = 0.8 if protection is to the base flood elevation + 1 foot
- ?? FPL = 0.7 if protection is to the base flood elevation
- ?? FPL = 0.6 if protection is to the 50-year flood elevation
- ?? FPL = 0.5 if protection is to the 25-year flood elevation
- ?? FPL = 0.4 if protection is to the 10-year flood elevation

Calculation: For each structure, multiply the values of TU and FPL. This will give you the retrofitted building (RB) credit for that structure only. Add up the total value for each building to determine your total RB score.

Example: Buildings A and B have been elevated so the lowest flood is above the level of the last flood, which was about a 100-year event.

Calculation: TU = 1.0; FPL = 0.7 \times RB = 0.7.

Impact Adjustment: There are two options to choose from:

- 1) 1.0 (full credit) if at least five buildings in the community have been retrofitted using one or more of the techniques described in #1 above, meet the same permitting standards, and human intervention or high hazard area standards if applicable.
- 2) The weighted ratio of floodproofed buildings to the number of buildings in the community's regulated floodplain. To calculate this, multiply the RB variable by 100 and divide that number by the total number of buildings in the regulated floodplain (maximum value = 100).

Documentation: For this impact adjustment, the community must complete Activity worksheet AW-531 with the following data for each retrofitted building: address, protection technique used (TU), and the building's flood protection level (FPL). The community must also have a map showing the location of all retrofitted buildings for which credit is being applied. The buildings must be located in the floodplain as shown on the FIRM or in the regulatory floodplain as shown on an Impact Adjustment Map if completed for 400 Series credit. The community must also show the total number of buildings in the floodplain.

Formula: Total credits = **28 X RB**. (Maximum credit of 2,800 points received by reaching 100 under impact adjustment option 2.)

Documentation: Documentation for each retrofitted building that is

appropriate to the type of retrofitting. Note: under ordinary circumstances, communities in the NFIP must retrofit buildings if they have been substantially damaged or improved. Retrofitting credit is typically not considered because the community is complying with the federal minimum standards of the NFIP. If the community is applying for credit for retrofitting buildings located outside the floodplain, documentation must be provided that shows the floodplain regulations that are in effect in the area outside of the floodplain.

Activity 540 – Drainage System Maintenance (Maximum credit: 330 points)

Since much of the land is flat in Nebraska, a community's drainage system takes on added importance so that water is taken away from the community. In order to keep this drainage system working properly, regular maintenance is necessary.

1) Channel and Debris Removal – 300 points

Action: The community regularly inspects its drainage system and responds to drainage-related problems.

Credit:

✍️ 200 points if the community does all of the following:

- ?? An inspection is conducted at least once each year
- ?? An inspection is conducted after each storm that could adversely impact the drainage system
- ?? Inspections are conducted in response to citizens' complaints
- ?? Action is taken after an inspection identifies a need for maintenance or cleaning

✍️ 50 points if the community's program identifies specific problem sites that are inspected and maintained differently or more frequently than other parts of the drainage system.

Documentation: Must state specific problem sites that are inspected and maintained differently than the main "documentation" section below.

✍️ 50 points if the community has an ongoing program, such as a capital improvements plan, to eliminate or correct problem sites or to construct "low maintenance" channels or other facilities. There is no credit for this item if the community does not spend money on a regular basis on such improvement projects.

Documentation: A copy or description of the capital improvements program or other documentation that shows the community (or other drainage maintenance agency) has an ongoing program to reduce drainage maintenance problems.

Documentation: The procedures, instructions, or other documents that explain the community's routine inspection and debris removal program must:

- ?? Identify who is responsible for the various aspects of the maintenance program.
- ?? Describe the community's drainage system and the areas subject to the maintenance program.
- ?? Explain the procedures for inspection, including when regular inspections are conducted and how soon inspections are conducted after a complaint or a storm.

- ?? Explain debris removal procedures (i.e., how soon after an inspection an area must be cleared and what can and cannot be removed).
 - ?? Include the records that are kept to document both the inspections and the removal projects.
- 2) **Stream Dumping Regulations** – 30 points
- Action:* The community has regulations that prohibit dumping in the community's drainage system and publicizes these regulations.
- Credit:*
- ?? 15 points if regulations prohibit dumping in the community's drainage system.
 - ?? 30 points if regulations prohibit dumping in the community's drainage system and the community publicizes the regulatory requirements.
- Documentation:*
- ?? An annual outreach project to the community under Activity 330
 - ?? Posting "No dumping in the stream" signs at key locations in the drainage system, such as frequent problem spots, schools, and public parks
- Impact Adjustment:* A ratio of length of streams and ditches in the developed portion of the community to the total length of those reaches subject to the program. Note: areas which are sparsely populated or have no buildings may be exempted from the total length of drainage in the calculations.
- Documentation:* Stream ordinance or law regulating disposal of debris in the affected drainage system. The ordinance or law must designate an office or official responsible for receiving complaints and monitoring compliance and it must include enforcement and abatement provisions. If the community uses an impact adjustment other than the minimum default value, it must prepare an Impact Adjustment Map that shows all channels and other drainage facilities in the developed part of the community and identifies which channels and facilities are covered by the channel and basin debris removal program.

SERIES 600 – FLOOD PREPAREDNESS ACTIVITIES

Activities in this series are usually coordinated at the local level by the emergency manager. They include actions that should be taken to minimize the effects of a flood on people, property, and building contents.

Activity 610 – Flood Warning Program (Maximum credit: 200 points)

- 1) **Flood Threat Recognition System** – 40 points
- Action:* The community has a system that provides an early notice of a flood at at least one location within the community. The system must be able to predict specific flood conditions (i.e., crest height and time) in the future.
- Prerequisites:* To receive credit for this element:
- ?? The data collection, communications, and data analysis components of the flood threat recognition system must be regularly maintained at least annually

- ?? The community must submit descriptions of the flood hazard and the flood recognition system

Credit: Depending on who operates the flood threat recognition system, there are two main options for the number of points:

- 1) If the system is operated by a federal, state, or agency other than the community, points are awarded as follows:
 - a) 20 points if the community demonstrates that it is prepared to receive and react to flood warnings on a 24-hour basis. The information received must be specific to one or more sites on each river in the community and include flood elevations and arrival times or other specific data appropriate for warning (note: river stage reports from the National Weather Service, Corps of Engineers, or other agency qualify for the full 20 points), or
 - b) Either:
 - ?? 5 points if a manual technique is used to predict downstream arrival time and peak flow or elevations
 - ?? 20 points if a computerized flow or model is used to produce more locally pertinent flood threat information. This model may be either a “real-time” model run during the flood, or maps, charts, and other output from a model that provides detailed data for points other than those specifically forecast in a) above.
- 2) If the flood threat recognition system is operated by a local, state, or other non-federal agency, the three options for points are:
 - a) Either:
 - ?? 15 points for a collection system based on precipitation and/or river gage data that are manually read and reported (i.e., by volunteer); or
 - ?? 20 points for an automated precipitation and/or river gage data collection and reporting system
 - b) 10 points if the density of the gage network is at least one per 10 square miles, or if all upstream tributaries with more than 10 square miles are gaged
 - c) Either:
 - ?? 5 points if a manual technique is used to predict downstream arrival time and peak flow elevations; or
 - ?? 10 points if a verified digital flow prediction model is used to analyze the data collected to predict downstream arrival time and peak flow or elevations

2) Emergency Warning Dissemination – 60 points

This element credits arrangements for warning the public of a flood threat.

Prerequisites:

- ?? The community must receive credit for the flood threat recognition system (#1 above).
- ?? The community must have adopted an emergency response plan, and the items for which this credit is requested must be in the plan or in appendices or procedures adopted or developed as part of that plan.

Documentation: Proof that the plan has been adopted by the community.

- ?? The warning must be disseminated in ways that can reach people in a timely manner, including at night or in heavy storms. If the warning lead time is under 12 hours, it is not sufficient to rely only on radio and television announcements.

Documentation: Proof that the plan has been adopted by the community.

- ?? The warning equipment and procedures must be tested at least annually.

Documentation: Proof that the plan has been adopted by the community.

- ?? The community must publicize the warning procedures at least annually. This may be done as by using an outreach project which qualifies under Activity 330.

Documentation: A copy of the materials used to publicize the warning system. The same criteria applies from Activity 330 (i.e., reach at least 90% of the target audience and be an annual outreach project).

Credit: The total of all following points if these measures are specified in the adopted plan:

- ?? 10 points for having an adopted policy that specifies when and how a warning is issued and what messages will be used. The policy must provide adequate guidance to allow staff to quickly issue appropriate warnings
- ?? 15 points for either an outdoor voice-sound system or a fixed siren system
- ?? 30 points for dissemination of warnings by door-to-door contact or mobile public address systems
- ?? 10 points for warning dissemination through the Emergency Alert System
- ?? 15 points for a telephone system that reaches all floodplain residents
- ?? 10 points for warning dissemination using a cable television override system
- ?? 10 points for local AM radio transmitters used for public announcements
- ?? Contact your ISO/CRS Specialist to ask if credit will be given for warning system activities not listed

3) Other Response Efforts – 50 points

Prerequisites:

- ?? The community must receive some credit under both #1 and #2 above.
- ?? The community must conduct at least one exercise (table-top, drill, or response to an actual disaster) of the response plan each year. If the flood response plan is part of a multi-hazard plan, then the exercise may be in response to another disaster provided the parties and tasks are substantially the same.

Credit: The total of the credit points for the following three actions:

- ?? 20 points if the adopted plan is keyed to specific predicted flood levels or other appropriate data furnished by the flood threat recognition system
- ?? 10 points if the adopted plan identifies responsibility for flood response tasks for the community's staff and other public and private organizations

- ?? 20 points if the adopted plan includes a summary of the estimated staff, equipment, supplies, and time required for each flood response task and the sources of the necessary resources

4) **Critical Facilities Planning – 50 points**

Action: The community coordinates with operators of critical facilities.

Prerequisites:

- ?? The community must receive some credit for both #1 and #2 above.
- ?? The community must update the information on its critical facilities at least annually.

Credit: One of the following:

- ?? 10 points if the adopted plan includes the names and telephone numbers of the operators of all critical facilities affected by flooding.
- ?? 20 points if the adopted plan includes arrangements for providing special warnings or early notifications directly to all facilities that need them.
- ?? 20 points if the critical facilities needing them have their own flood response plans that have been developed, reviewed, or accepted by the community.

Impact Adjustment: If all critical facilities affected by flooding have their own response plans, there is no adjustment for this credit.

Impact Adjustment (for numbers 1, 2, and 3 only): For each element, divide the number of buildings affected by the total number of buildings in the floodplain.

Documentation: A description of the community's flood threat recognition system. The following items must be included (if the community is applying only for credit under #1, documentation of the first and third items is all that is needed):

- ?? A description of the flood hazard
- ?? A description of the areas affected by flooding and the impact of flooding on those areas
- ?? A description of the system used to recognize and evaluate an impending flood
- ?? Flood warning lead times for each stream or body of water covered by the program

?? **Information and explanation about impact adjustment calculations**

- †† If the community experienced at least one flood during the previous year that damaged more than 10 buildings, caused more than \$50,000 in property damage, or caused the death of one or more persons, it must submit an evaluation report that describes the performance of the warning system. For each flood meeting the above criteria, this report must describe how the program operated in response to the flood, and any improvements that may be needed.

Activity 620 – Levee Safety (Maximum credit: 900 points)

Credit is provided for maintaining levees and a levee emergency response plan for areas protected by less than base flood levees.

Prerequisites:

- ?? The levee or floodwall must have been built before January 1, 1991. If a levee existed in an unimproved state before this date, this qualifies.
- ?? The levee or floodwall must protect to at least the 25-year flood elevation.
- ?? The community must have a levee emergency plan that specifies these actions which are to be taken at various flood stages:
 - ?? Periodic patrols of the structure
 - ?? Closing opening that are structural parts of the system (sandbagging is not acceptable)
 - ?? Warning local community officials when the flood reaches within 4 feet of the crown of the levee
 - ?? Monthly communications checks with local emergency officials
 - ?? Annual inspections of emergency equipment and stockpiles
 - ?? Annual drills

1) Levee Protection Level (LPL) – 100 points

Every levee is designed to protect to a certain flood elevation. The levee's flood protection level may be determined by the U.S. Army Corps of Engineers or other federal agency that has inspected the levee. In the absence of a determination by a federal agency with jurisdiction, the levee's protection level is 3 feet below the lowest point of the crown.

Credit: The number of points awarded is equal to the year of flood to which the levee protects. The maximum value of 100 points is awarded if the levee protects to the base flood elevation; 25 points is the minimum value.

Impact Adjustment: If all the buildings in the community's floodplain are protected by a single levee or if the levee system is built to a single flood protection level, there is no adjustment. If these two conditions are not met, the adjustment is to use the ratio of buildings protected by the levee to the total number of buildings in the community's regulatory floodplain.

Documentation: The impact adjustment data must be provided if used.

Formula: $9 \times \text{LPL} \times \text{impact adjustment value (if used)}$

Documentation: There are three things to document:

1) Either:

- ?? A statement signed by the Corps of Engineers or other federal agency with jurisdiction that has inspected the levee that:
 - a) States the levee protection level; and
 - b) Provides the date of construction; or
- ?? A certification by a registered professional engineer that:
 - a) States that the levee or floodwall meets all the NFIP levee recognition requirements (44CFR 65.10) except for height;
 - b) Provides the date of construction; and
 - c) Provides the protection elevation and the flood recurrence interval for that elevation. Data sources and calculations must be included.

2) A copy of the community's levee emergency plan.

3) A map showing the area that the levee protects. No credit is provided for levees that protect vacant land or properties in B, C, or X Zones.

Note: For recertification each year, a registered professional engineer must certify that the levee has been maintained in such a manner that it meets all

the NFIP levee maintenance requirements. Also, if they helped build a levee, the Corps of Engineers usually inspects it.

Activity 630 – Dam Safety (Maximum credit: 120 points)

Nebraska has a statewide dam safety program, which automatically qualifies every community in the State for **68 points** under #1 below. However, a community may go above and beyond these state standards for additional CRS credit.

1) State Dam Safety Program – 75 points

Action: Nothing! See comment above.

2) Dam Failure Regulations – 20 points

Action: The community requires all new buildings constructed in the area subject to dam failure inundation to be protected from damage in the case of dam failure.

Documentation: The ordinance or law language that regulates the area subject to inundation in the event of dam failure. The regulations must be based on an engineer's certification that the new buildings will be designed to be protected from damage by dam failure.

3) Dam Failure Emergency Action Plan – 25 points

The community must have a dam failure emergency plan that includes all of the following:

- ?? Annual reports by the dam operators on the safety and operational status of their dams. Copies of these reports must be sent to the community and the state dam safety office.
- ?? Notification procedures to be implemented when a dam appears threatened by high water or possible failure.
- ?? Monthly communication checks between dam operators and emergency services officials.
- ?? Evacuation routes, special warning procedures, and other appropriate items that need to be included in the community's emergency preparedness or flood response plan.
- ?? The community must conduct at least one exercise of the emergency action plan each year. The exercise may be a table top exercise, drill, or response to an actual disaster. If the dam failure emergency action plan is part of a multi-hazard plan, then the exercise may be in response to another disaster provided the parties and tasks involved are substantially the same.

Documentation: The dam failure emergency action plan.

Impact Adjustment: If the entire area of the community's regulated floodplain is subject to dam failure regulations, there is no impact adjustment. If only a portion of the area is regulated, the adjustment is the ratio of area subject to dam failure regulations to the total area of the regulated floodplain.

Documentation: Information used to determine the adjustment and the Impact Adjustment Map.

Documentation: If applying for credit under #1 or #2 above, the community must

prepare a dam failure inundation map showing the areas affected by a failure of one of more upstream dams. The map must have been reviewed and approved by the state dam safety office.

Activity 710 – Community Growth Adjustment

Activities related to new development are more important in growing communities than in communities with little or no pressure for development in floodplains. This series allows for an adjustment for the 400 Series' regulatory activities to reflect the community's growth rate. The community growth adjustment is applied by multiplying the number of points for the activity times the average growth rate.

Two sources of information can be used to determine a community's growth rate:

- 1) U.S. Census Rate – This source calculates the average annual rate of increase in the number of households for the entire county. Using this rate accounts for growth pressure throughout the entire area and for potential annexations; however, if an individual community is growing faster than the county, the community may opt to use the next option.
- 2) Community Growth Rate – This is the growth rate of households or buildings that may be submitted by the community. This information must be taken from a growth rate accounting system that is used for state or federal reporting requirements (i.e., another agency has reviewed and accepted the approach). The minimum period for determining the community growth rate is 5 years. Annexation of developed areas may not be included as a source of growth. An incorporated municipality may use the U.S. Census growth rate for the community if it is higher than the U.S. Census Growth Rate for the county.

Calculations: Two methods can be used to determine the **average growth rate**:

- ?? Average growth rate = the U.S. Census growth rate; or
- ?? Average growth rate = an average of the U.S. Census growth rate and the community growth rate (both rates added together, divided by 2).

- †† If the average growth rate is less than zero, a value of zero is used – this will result in no community growth adjustment.
- †† If the average growth rate is greater than five, a value of five is used – this will result in a 50% increase of all credits earned under Activity 400.

Formula: Community growth adjustment = $1 + (0.1 \times \text{average growth rate})$

Documentation: If the community has growth rate data other than U.S. Census data for households or buildings, documentation that these data have been accepted by a state or federal agency for reporting requirements.

Note: FEMA provides the U.S. Census growth rate information to the community after it expresses interest in applying for the CRS. In Nebraska, another source of growth rate data is the Nebraska Department of Economic Development.

Activity 720 – Community Total Points

Activity Worksheet AW-720 is used to calculate the community's total points. It is also used by the ISO/CRS Specialist during verification and by the community when it submits a modification.

- †† For each element that the community is applying for, add up the credits to determine the total number of CRS points.

- † † Divide this number by 500 and round down to the nearest whole number to determine how many CRS numbers your community may receive. If verified as correct, for every number your CRS rating drops, your community will be eligible for a 5% discount in flood insurance premiums community-wide.